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Application No: 10588992 Version No: 1.1

Input Set:

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<110> SCHUIJFFEL, Danielle Francisca
NUIJTEN, Petrus Johannes Maria

<120> *Ornithobacterium rhinotracheale* subunit vaccines

<130> I-2004.011 US

<140> 10588992

<141> 2007-05-25

<150> PCT/EP2005/050577

<151> 2005-02-09

<150> EP 04075427.7

<151> 2004-02-11

<160> 16

<170> PatentIn version 3.3

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Gly Lys Val Glu Ser Trp Asn Lys Lys Val Gly Asp Lys Val Ser Tyr
20 25 30

ggc gac atc tta gcc gaa atc gaa aca gat aaa gcg gtt caa gaa ttt 144
Gly Asp Ile Leu Ala Glu Ile Glu Thr Asp Lys Ala Val Gln Glu Phe
35 40 45

gaa aca gat gta gaa ggt act ctt tta tac atc ggt gta gag gct ggt 192
Glu Thr Asp Val Glu Gly Thr Leu Leu Tyr Ile Gly Val Glu Ala Gly
50 55 60

caa gca gca cca gtt gat agt att tta gct atc atc ggt gca gaa ggc 240
Gln Ala Ala Pro Val Asp Ser Ile Leu Ala Ile Ile Gly Ala Glu Gly
65 70 75 80

gaa gac atc agc ggt ttg gta agc ggt gga ggt gct agc caa tca gcg 288
Glu Asp Ile Ser Gly Leu Val Ser Gly Gly Ala Ser Gln Ser Ala
85 90 95

cca gct caa gaa gct gcc gct cct gca gaa gaa cca caa gcg gaa gct			336
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100	105	110	
gca cca gcg gct gaa gtt cca gaa aat gta act atc gtt tct atg cca			384
Ala Pro Ala Ala Glu Val Pro Glu Asn Val Thr Ile Val Ser Met Pro			
115	120	125	
aga ttg agc gat acc atg gaa gaa ggt aaa gta gaa tct tgg aac aaa			432
Arg Leu Ser Asp Thr Met Glu Glu Gly Lys Val Glu Ser Trp Asn Lys			
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Lys Val Gly Asp Lys Val Ser Tyr Gly Asp Ile Leu Ala Glu Ile Glu			
145	150	155	160
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Thr Asp Lys Ala Val Gln Glu Phe Glu Thr Asp Val Glu Gly Thr Leu			
165	170	175	
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Leu Tyr Ile Gly Val Glu Ala Gly Gln Ser Ala Pro Val Asp Ser Ile			
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Leu Ala Ile Ile Gly Pro Glu Gly Thr Asp Val Ser Ala Ile Val Ala			
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gga ggt ggt gca aaa cca gct gct aaa gcg gaa gct cca aag gct gaa			672
Gly Gly Gly Ala Lys Pro Ala Ala Lys Ala Glu Ala Pro Lys Ala Glu			
210	215	220	
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Pro Ala Ala Pro Lys Ala Gln Ala Thr Asn Asn Ser Gly Arg Val Phe			
245	250	255	
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Ile Ser Pro Leu Ala Lys Lys Leu Ala Asp Glu Lys Gly Tyr Asp Ile			
260	265	270	
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Val Glu Asn Phe Thr Pro Gln Ala Ala Ala Lys Pro Ala Val Ala			
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Gly Pro Val Ala Leu Glu Val Gly Glu Asp Thr Val Ile Pro Asn Ser			
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35 40 45

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Gln Ala Ala Pro Val Asp Ser Ile Leu Ala Ile Ile Gly Ala Glu Gly
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Glu Asp Ile Ser Gly Leu Val Ser Gly Gly Ala Ser Gln Ser Ala
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Pro Ala Gln Glu Ala Ala Ala Pro Ala Glu Glu Pro Gln Ala Glu Ala
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Ala Pro Ala Ala Glu Val Pro Glu Asn Val Thr Ile Val Ser Met Pro
115 120 125

Arg Leu Ser Asp Thr Met Glu Glu Gly Lys Val Glu Ser Trp Asn Lys
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Lys Val Gly Asp Lys Val Ser Tyr Gly Asp Ile Leu Ala Glu Ile Glu
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Thr Asp Lys Ala Val Gln Glu Phe Glu Thr Asp Val Glu Gly Thr Leu
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180 185 190

Leu Ala Ile Ile Gly Pro Glu Gly Thr Asp Val Ser Ala Ile Val Ala
195 200 205

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210 215 220

Ala Pro Lys Gln Ala Ala Pro Ala Gln Glu Lys Lys Glu Thr Pro Ala
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Pro Ala Ala Pro Lys Ala Gln Ala Thr Asn Asn Ser Gly Arg Val Phe
245 250 255

Ile Ser Pro Leu Ala Lys Lys Leu Ala Asp Glu Lys Gly Tyr Asp Ile
260 265 270

Asn Gln Ile Gln Gly Thr Gly Asp Asn Gly Arg Ile Ile Lys Lys Asp
275 280 285

Val Glu Asn Phe Thr Pro Gln Ala Ala Ala Lys Pro Ala Val Ala
290 295 300

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305 310 315 320

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325 330 335

Ala Pro His Tyr Tyr Leu Thr Ile Glu Val Asp Met Asp Asn Val Met
340 345 350

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355 360 365

Asn Asp Ile Val Leu Lys Ala Thr Ala Met Ala Val Lys Lys His Pro
370 375 380

Val Val Asn Ser Thr Trp Lys Asp Asn Glu Ile Val Gln Tyr Ala Ala
385 390 395 400

Val Asn Ile Gly Val Ala Val Ala Val Pro Asp Gly Leu Val Val Pro
405 410 415

Val Val Lys Asn Thr Asp Leu Lys Ser Leu Ser Gln Ile Ser Ala Glu
420 425 430

Val Lys Asp Leu Ala Thr Arg Ser Arg Asp Arg Lys Ile Lys Ala Asp
435 440 445

Glu Met Glu Gly Ser Thr Phe Thr Val Ser Asn Leu Gly Ala Tyr Gly
450 455 460

Val Glu Ser Phe Thr Ser Ile Ile Asn Gln Pro Asn Ser Cys Ile Leu
465 470 475 480

Ser Val Gly Ala Ile Val Glu Lys Pro Val Val Lys Asn Gly Gln Ile
485 490 495

Val Val Gly His Thr Met Lys Leu Cys Leu Ala Cys Asp His Arg Thr
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Phe Ala Ala Cys Ser Asp Phe Asp Tyr Asn Val Glu Asn Pro Asn Leu
20 25 30

acg aag gga gag gct gat ttc tct aaa tat gta gct tta gga aat tct 144
Thr Lys Gly Glu Ala Asp Phe Ser Lys Tyr Val Ala Leu Gly Asn Ser
35 40 45

ctc act tct ggt tat tca gac gga gcc tta tat cgc tcg gca caa gag 192
Leu Thr Ser Gly Tyr Ser Asp Gly Ala Leu Tyr Arg Ser Ala Gln Glu
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85	90		95	
gat ttg ttt gaa gca agt aaa cac acc gca ttt tac gga aaa tta gaa Asp Leu Phe Glu Ala Ser Lys His Thr Ala Phe Tyr Gly Lys Leu Glu				336
100	105		110	
tta aaa atc gta gac ggt gca cct acg cca gtg cct tct gtg cct aag Leu Lys Ile Val Asp Gly Ala Pro Thr Pro Val Pro Ser Val Pro Lys				384
115	120		125	
ttt agt tta gct caa acc ttc gta aaa ggg aat ttt aat aat ttg ggc Phe Ser Leu Ala Gln Thr Phe Val Lys Gly Asn Phe Asn Asn Leu Gly				432
130	135		140	
gtg cca ggg gct aaa tct tat cat tta gct caa ggt tac gga aat Val Pro Gly Ala Lys Ser Tyr His Leu Leu Ala Gln Gly Tyr Gly Asn				480
145	150	155	160	
att gct aat ctg aag gag agt aaa gcc aat cca tat ttt gtg cga ttt Ile Ala Asn Leu Lys Glu Ser Lys Ala Asn Pro Tyr Phe Val Arg Phe				528
165	170		175	
gct agc caa cca aat gcc agc gtg ctg agc gat gct ttg gca caa aaa Ala Ser Gln Pro Asn Ala Ser Val Leu Ser Asp Ala Leu Ala Gln Lys				576
180	185		190	
cct aca ttc ttt acc tta tgg atc ggg aac aac gat gtt tta ggc tat Pro Thr Phe Phe Thr Leu Trp Ile Gly Asn Asn Asp Val Leu Gly Tyr				624
195	200		205	
gcc atg aat ggc gca gca agc aca gat cga aaa ggg aac cct gat gta Ala Met Asn Gly Ala Ala Ser Thr Asp Arg Lys Gly Asn Pro Asp Val				672
210	215		220	
aca aca tat aat tca aat gat ttg tct gat gct aac ttg gtg gca ggc Thr Thr Tyr Asn Ser Asn Asp Leu Ser Asp Ala Asn Leu Val Ala Gly				720
225	230	235	240	
tct att caa aaa tta gta aaa gca ctt aca gat tca ggc gca aaa ggt Ser Ile Gln Lys Leu Val Lys Ala Leu Thr Asp Ser Gly Ala Lys Gly				768
245	250		255	
gct gta gcg aat ttg cct tat gtc gaa gac att ccg tat ttt aca acc Ala Val Ala Asn Leu Pro Tyr Val Glu Asp Ile Pro Tyr Phe Thr Thr				816
260	265		270	
gtg ccg gct gag cct tta agc cct tta aac aaa agt tac gct aca caa Val Pro Ala Glu Pro Leu Ser Pro Leu Asn Lys Ser Tyr Ala Thr Gln				864
275	280		285	
att gaa aat ttg aat aaa ttt tat gct agc cta aat aaa gtt ttt gat Ile Glu Asn Leu Asn Lys Phe Tyr Ala Ser Leu Asn Lys Val Phe Asp				912
290	295		300	

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Ala Leu Gly Ala Ser Asp Arg Lys Ile Thr Phe Asn Ala Asp Lys Ala
305 310 315 320

agc ggt gct gtg att gta gat aaa agt ttg cca gat tta agt caa aaa 1008
Ser Gly Ala Val Ile Val Asp Lys Ser Leu Pro Asp Leu Ser Gln Lys
325 330 335

atc tta gca acc tta cta aaa tta gaa ttc cca aac gaa aaa gct aaa 1056
Ile Leu Ala Thr Leu Leu Lys Leu Glu Phe Pro Asn Glu Lys Ala Lys
340